

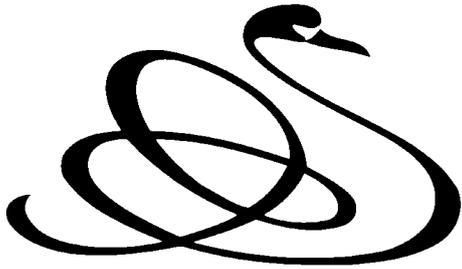
York Aviation

CONSORTIUM OF SCOTTISH AIRPORTS

THE IMPACT OF AIR PASSENGER DUTY ON SCOTLAND

Final Report

October 2012



York Aviation

Originated by: James Brass

Dated: 29th October 2012

Reviewed by: Richard Connelly

Dated: 29th October 2012

CONSORTIUM OF SCOTTISH AIRPORTS
THE IMPACT OF AIR PASSENGER DUTY ON SCOTLAND

Contents

	<u>Page</u>
KEY MESSAGES	
1 INTRODUCTION.....	1
2 THE RECENT HISTORY OF APD.....	2
3 IMPACT ON DEMAND AT SCOTLAND’S AIRPORTS.....	8
4 ECONOMIC IMPACT OF THE CHANGES TO APD	15

KEY MESSAGES

- The UK Government has significantly increased rates and restructured APD since 2007. Rates for short haul travel have increased by around 160% but it is long haul travel that has really been penalised with rates increasing by between 225% and 360%. This has been done at a time, latterly, when Scotland and the rest of the UK have been experiencing one of the worst recessions in living memory. Furthermore, there would appear to be evidence that further rate increases may occur in the future.
- The UK appears to be out of step with much of the rest of Europe on this issue. Rates are higher than elsewhere by some margin and while some others are abolishing or reducing the burden on passengers, the UK has increased it. Austria and Germany have recently introduced similar taxes but these are considerably lower and appear to have been reduced slightly after the first year of operation.
- Scotland and its economy is particularly reliant on air service access, being geographically peripheral from the key centres of Europe and the UK and with its history as a trading nation, reflected particularly in Edinburgh and Glasgow positions as international financial and business services centres, and in Aberdeen's position as a key global centre for the energy industry. Tourism is also a key component of the economy, bringing visitors from around the world. Any loss of connectivity will impact on Scotland's competitiveness with long haul routes recognised as being of particular economic and strategic importance to the Scottish economy.
- The impact of the changes in APD since 2007 has been significant. Each increase or change in structure has resulted in a widening of the gap between actual performance and what Scotland's airports could have achieved without APD.
- In our analysis the initial doubling of APD in 2007 has an initial dramatic effect with around 1.2 million passengers lost in 2007. The next significant step comes with the increase in rates in November 2010. In 2011, the first full year of impact, the gap between the Without APD increases case and the With APD Increases case grows from around 1.4 million in 2010 to over 1.7 million in 2011. By 2016 the total difference in traffic has reached around 2.1 million passengers per annum.
- Over time the impact becomes increasingly concentrated on international traffic, with longer haul passengers particularly affected. This focus of the impact on international traffic is particularly concerning given the policy aims of the Scottish Government to grow the Country's international connectivity.
- In terms of the knock-on impacts to the Scottish economy, APD will over the long term reduce traffic and connectivity from Scotland's airports, impacting on inward investment, trade and competitiveness. It also impacts on Scotland's inbound tourism industry. By 2016 we estimate that £210 million per annum less will be being spent in Scotland by inbound visitors than if APD had not risen as it has since 2007. It should also be remembered that Scotland's airports are major employment centres in their own right and that APD's impact on traffic will limit the role they can play as generators of job opportunities and prosperity. We also estimate that in broad terms the impact of APD on other tax revenues in Scotland could be around £50 million by 2016.

1 INTRODUCTION

- 1.1 In September 2012 Aberdeen, Edinburgh and Glasgow airports commissioned York Aviation to undertake an assessment of the impact of Air Passenger Duty (APD) across the Scottish air transport market. This work builds upon the previous research undertaken in this area by York Aviation in February 2011 following the increases in APD in November 2010 and its restructuring in to four separate distance bands.
- 1.2 Scotland and its economy is particularly reliant on air service access, being geographically peripheral from the key centres of Europe and the UK and with its history as a trading nation, reflected particularly in Edinburgh and Glasgow positions as international financial and business services centres, and in Aberdeen's position as a key global centre for the energy industry. Tourism is also a key component of the economy, bringing visitors from around the world.
- 1.3 On 1st April 2012, APD rates were increased again. The increases this time were more modest than those that have been seen in the recent years but they signal that APD is still seen as a potential source of additional tax revenue moving forward. This view has been reinforced by the announcement of further increases in April 2013. In this context Scotland's airports are keen to understand the extent of the impact that APD has had on the market.
- 1.4 This report focuses on a number of key areas:
- it charts the changes in APD that have taken place since the last report was produced and considers the potential future direction of APD rates;
 - it provides an update on the position on similar taxes across Europe and considers the UK's position;
 - it examines the impact that APD has had on traffic since its initial doubling in 2007 through to a projected position in 2016;
 - it considers in broad terms how these changes in traffic have impacted on the Scottish economy.

2 THE RECENT HISTORY OF APD

Introduction

2.1 Below we provide a brief overview of the development of Air Passenger Duty in the UK in recent years. We then move on to compare the UK's position on aviation duty to other countries around Europe.

APD in the UK

2.2 Since 2007 APD has both been increased substantially and restructured. In terms of restructuring, the Duty has moved from being a two distance band system to a four distance band system. A distinction between the rates charged to premium and economy class passengers has been retained. Passengers occupying seats in premium classes have APD levied at the full rate, while passengers in economy class or on services with only one class have APD levied at a reduced rate. The changes in rates and structure are set out in **Table 2.1**.

Table 2.1: Changes in APD Rates and Structure since 2007

	Pre Feb 2007		Feb 2007 to Oct 2009		Nov 2009 to Oct 2010		Nov 2010 to Mar 2012		April 2012 to Mar 2013		% Growth
	Full	Other	Full	Other	Full	Other	Full	Other	Full	Other	
Band A (0 to 2000 miles) or Europe pre Nov 2009	£10	£5	£20	£10	£22	£11	£24	£12	£26	£13	160%
Band B (2001 to 4000 miles) or Other pre Nov 2009					£90	£45	£120	£60	£130	£65	225%
Band C (4001 to 6000 miles) or Other pre Nov 2009	£40	£20	£80	£40	£100	£50	£150	£75	£162	£81	305%
Band D (over 6000 miles) or Other pre Nov 2009					£110	£55	£170	£85	£184	£92	360%

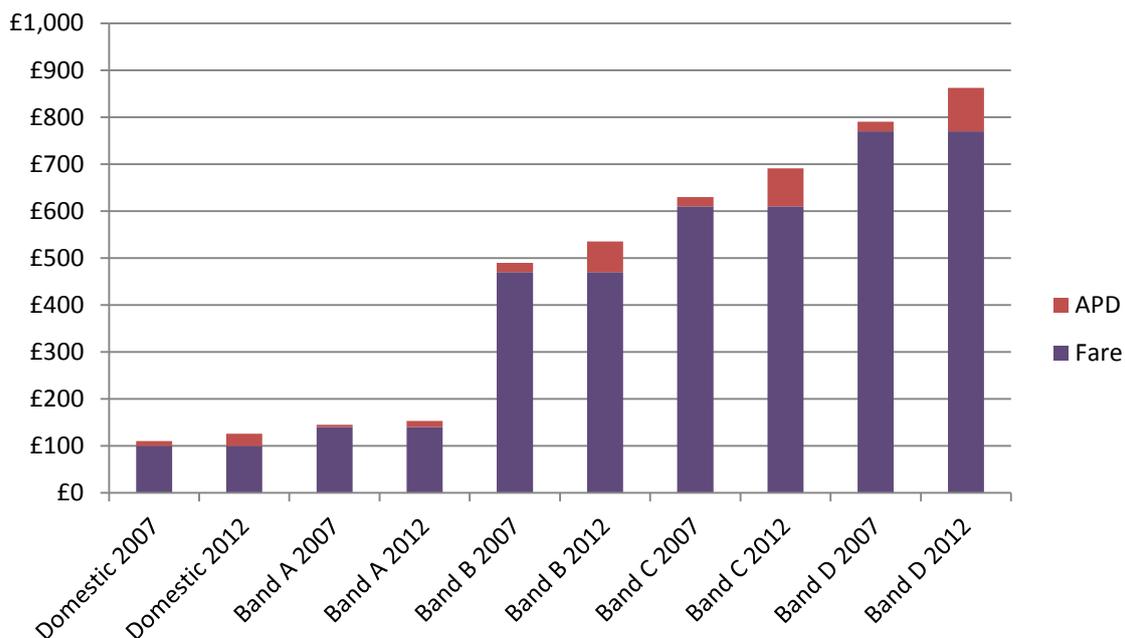
2.3 This demonstrates quite clearly the extent of the increases experienced by passengers since 2007. Medium and long haul passengers have been hardest hit, with APD rates increasing by between 225% and 360%. Passengers to Band C and D destinations have been particularly hard hit due to the introduction of the greater number of distance bands. Domestic and European rates have increased by substantially less but the growth has still been dramatic, with rates increasing by 160%.

2.4 It is perhaps helpful to think about these increases in terms of ‘real world’ examples:

- before the 2007 increase a family of four going on holiday to Spain in economy would have paid just £20 in APD for their trip. However, in summer 2012 to do the same trip they would have paid £52;
- the same family travelling to Florida for a holiday prior to 2007 would have paid £80 in APD for their trip. In summer 2012 they would have paid £260 for the same trip.

2.5 **Figure 2.1** shows how the increases between 2007 and 2012 have impacted in terms of a typical fare to each APD distance band.

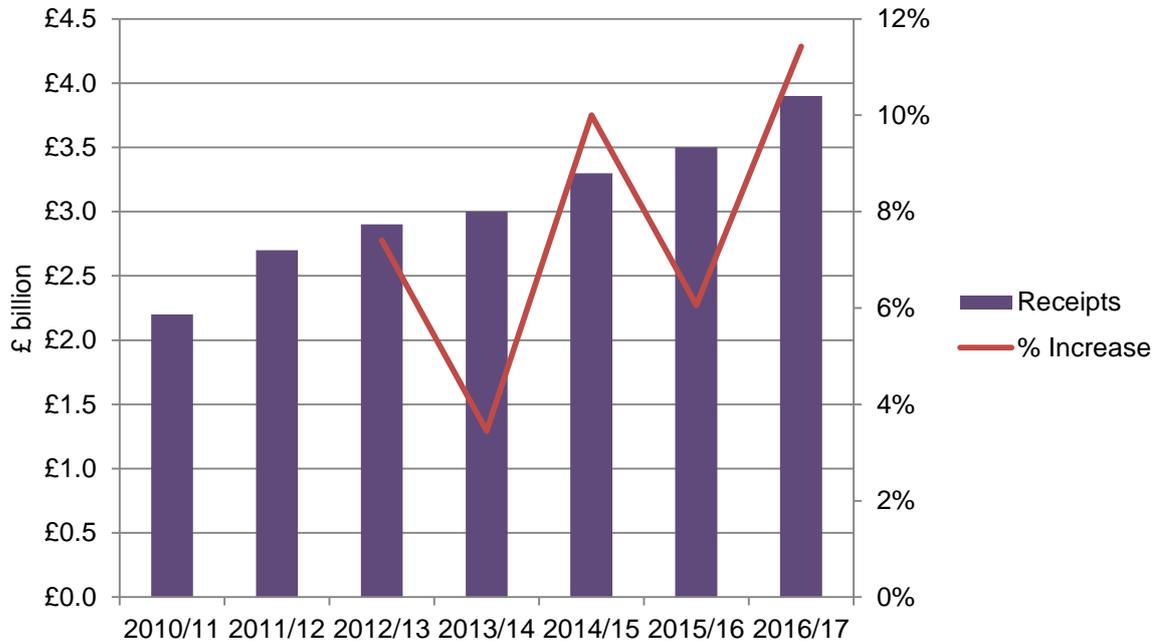
Figure 2.1: APD Compared to Typical Fares by Distance Band



Source: York Aviation.

- 2.6 This clearly shows how APD has increased substantially as a proportion of typical fares. For domestic travel APD has gone from being around 10% of the value of a fare to around 26%. For international travel, this proportion has gone from between 3% and 4% to between 9 % and 14%.
- 2.7 This impact is set to increase again in April 2013 when APD rates for long haul travel are set to rise again, with rates increasing by £4 for premium class passengers and £2 for economy class passengers.
- 2.8 Unsurprisingly, given the level of these increases, the air transport industry believes strongly that this level of taxation is severely damaging growth and is hampering the sector's ability to recover from an extremely severe recession and act as an economic driver for the future.
- 2.9 The one area of the UK that has been less affected by the APD is Northern Ireland. Effective from 1st November 2011 direct long-haul routes from Northern Ireland had their rates of duty reduced. Rather than attract rates at Band B or above, all direct long haul services from Northern Ireland only attract APD at Band A. This was seen as being important in retaining Northern Ireland's New York route and demonstrates the recognition that APD is affecting airline decision making.
- 2.10 There is also evidence to suggest that rates will continue to rise in the future despite the opposition from the air transport industry and increasing recognition from wider commentators that APD is damaging growth. The 2012 Budget documents identify that significant further increases are expected in receipts from APD in the coming years. These appear to be substantially above what might stem from traffic growth.

Figure 2.2: Project Revenue from APD from the Budget 2012



Source: Budget 2012.

2.11 Between 2012/13 and 2016/17, APD revenues are expected to rise by around £1 billion, from £2.9 billion to £3.9 billion. This represents a 34% increase in revenues. This suggests that further increases should be expected at some point in the future. In 2012 we estimate that APD revenue from passengers at Scotland’s airports was around £320 million per annum. This would suggest that by 2016/17 APD revenue from passengers at Scotland’s airport could be around £433 million per annum.

Aviation Duty in Europe

2.12 The UK is not the only European country to operate an aviation duty of some sort. A number of European countries have either considered or introduced aviation duties in recent years. It is difficult to be precise about exactly which countries have examined or implemented aviation duties as such duties come in a number of guises and it is not always clear on what basis the duty or charge is levied or its ultimate purpose. However, an updated version of our review from 2008 is set out in **Table 2.2** and we believe that this represents a good picture of the development and evolution of APD style charges to passengers in Europe in recent years.

2.13 There are a number of points to note:

Table 2.2: Aviation Duties in Europe

Country	Duty	Date	Notes
Austria	€8 to Europe, €40 Outside of Europe	From 1 st January 2011	Rates may now have been updated to follow Germany but no information found.
Belgium		2008	Aviation duty considered by Belgian Government. Never implemented due to concerns regarding impact on the industry
Netherlands	Range between €11 and €45	Introduced in 2008 then withdrawn in June 2009	Introduced as an environmental tax but the impact on demand was such that the tax was swiftly withdrawn.
Germany	€7.50 short haul, €23.43 medium haul, €42.18 long haul. These are the economy rates.	From 1 st January 2011. Updated in January 2012.	Led to a significant reaction from airlines, including the withdrawal of low fares airline capacity.
Denmark	€10	Abolished in 2007	Briefly introduced a ticket tax but has since been withdrawn.
France	€1 in Europe, €4 outside Europe	Introduced in 2006	Purpose of this tax is unclear. Levels are relatively low.
Ireland	€3	Introduced 1 st April 2009	Introduction of the original €10 tax has coincided with significant declines in passenger numbers at Ireland's airports. Reduced to €3 from 1 st March 2011.
Malta	€23	Abolished in 2008	Removed following legal challenge from the European Commission. Tax described as discriminatory.
Spain	Various – dependent on airport or state	These have been rising in 2012. Average rise estimated to be around 20%	There is a lack of clarity over precisely the levels of these taxes. Taxes appear to be around €13 to €14 at Madrid and Barcelona airports.

Source: York Aviation web searches.

- relatively few European countries currently operate an APD type duty. Austria, France, Germany, Ireland and Spain appear to be the only ones currently operating;
- nowhere in Europe imposes duties at as high a level as those observed in the UK;
- although schemes do have distance band elements within them, these are not as complex as those observed in the UK;

- a number of Governments have either not implemented, reduced or withdrawn aviation duties because of the potential damage to the air transport industry or the actual damage they have done. The most obvious example is the Netherlands, where the air passenger tax lasted only a year following a dramatic downturn in demand at Schiphol Amsterdam Airport. Passenger demand fell by 8% between 2008 and 2009. The Irish Government has also reduced its ticket tax from €10 to €3 in an effort to boost its flagging tourism economy, which has been badly hit by the global recession and the introduction of the ticket tax in 2008;
- it is also noticeable that the German air ticket tax appears to have had its rates reduced, if only slightly, after its first year of operation;
- the only other country where passenger taxes appear to have been increasing is Spain. The situation is slightly unclear and varies across the country but there appears to have been a general increase as fiscal pressure mounts on regional governments to balance their budgets.

2.14 Overall, while APD is not the only tax of its type in Europe, it does appear to be by some margin the highest and most punitive. This is bad for the industry in Scotland not only in real terms due to the loss of demand but also in terms of perception and the ability to secure the development of marginal routes. In the current market particularly, airlines are relatively risk averse and making decisions is often about marginal differences in costs and benefits. APD is seen as a negative and a potential additional risk factor for locating capacity in Scotland and indeed the rest of the UK compared to other locations in Europe.

3 IMPACT ON DEMAND AT SCOTLAND'S AIRPORTS

Introduction

- 3.1 In this Section we set out the results of our analysis of the demand impact of the APD increases of recent years at Scotland's airports. This has been based on a simple price model using data from CAA Statistics, CAA Passenger Survey 2009 and AirportIS (an IATA database providing information on passenger flows and air fares). This model was developed originally for our 2011 report and the key parameters remain the same. The primary difference in the analysis undertaken here is that it is both backward and forward looking. In our previous report, we focussed on considering how the APD rises in November 2010 would impact on Scotland's airports in the future. Here we have sought to look more explicitly at what has been the effect of the changes to APD since 2007, the opportunities for growth that have been lost and how growth might be impaired through to 2016.

Structure of the Model

- 3.2 The basic premise of the model is to identify the increase in average ticket price resulting from a change in the level of APD and then apply an appropriate price elasticity to identify the resulting impact on demand. It should be noted that these elasticities represent long run relationships between price and demand. This can lead to modelled changes in the short run that would in reality take time to appear. However, this does not change the ultimate medium to long term impacts.
- 3.3 The model splits the Scottish air transport market in to a range of different market segments and across Scotland's main airports. The market is split in to:
- business and leisure passengers;
 - premium class and economy class ticket holders;
 - Scottish, other UK and foreign passengers.

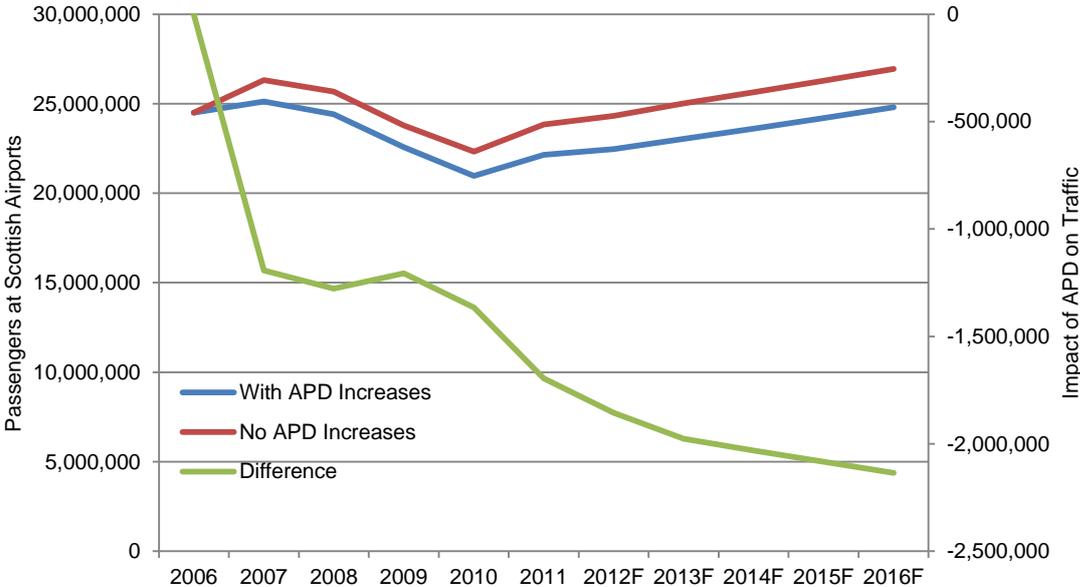
- 3.4 This combination of factors makes for a total of 12 passenger segments when combined the various permutations available (e.g. one category would be Scottish Business passengers travelling on a premium class ticket). Passengers have then been allocated to the appropriate APD Band for their final destination (domestic travellers have been separated out from other Band A passengers as domestic passengers will attract APD for both their outward and return journeys). The data to enable this segmentation has been taken from CAA Passenger Survey 2009. An average fare for each market segment and for each APD band has then been identified using data from AirportIS.
- 3.5 Results have been reported for the following airports and airport groups:
- Edinburgh;
 - Glasgow;
 - Aberdeen;
 - Inverness;
 - Glasgow Prestwick;
 - other Scottish Airports.
- 3.6 Looking forward, we have assumed that domestic traffic will grow at around 2% per annum and international traffic at around 3% per annum. This is a simplified assumption for the purposes of demonstration but is broadly in line with DfT's recent passenger forecasts for the UK published in 2011. The exception is traffic in 2012 which we have projected forward on the basis of actual performance to July 2012.

Impact on Passenger Demand

- 3.7 **Figure 3.1** shows our estimate of traffic at Scotland's airports without the increases in APD that have been seen since 2007 compared to actual performance up to 2011 and projected performance from 2012 onwards.
- 3.8 The impact of APD on total traffic since 2007 is plain to see. Each increase or change in structure has resulted in a widening of the gap between actual performance and what Scotland's airports could have achieved without APD.

The Impact of APD in Scotland

Figure 3.1: Demand Impact of APD since 2007



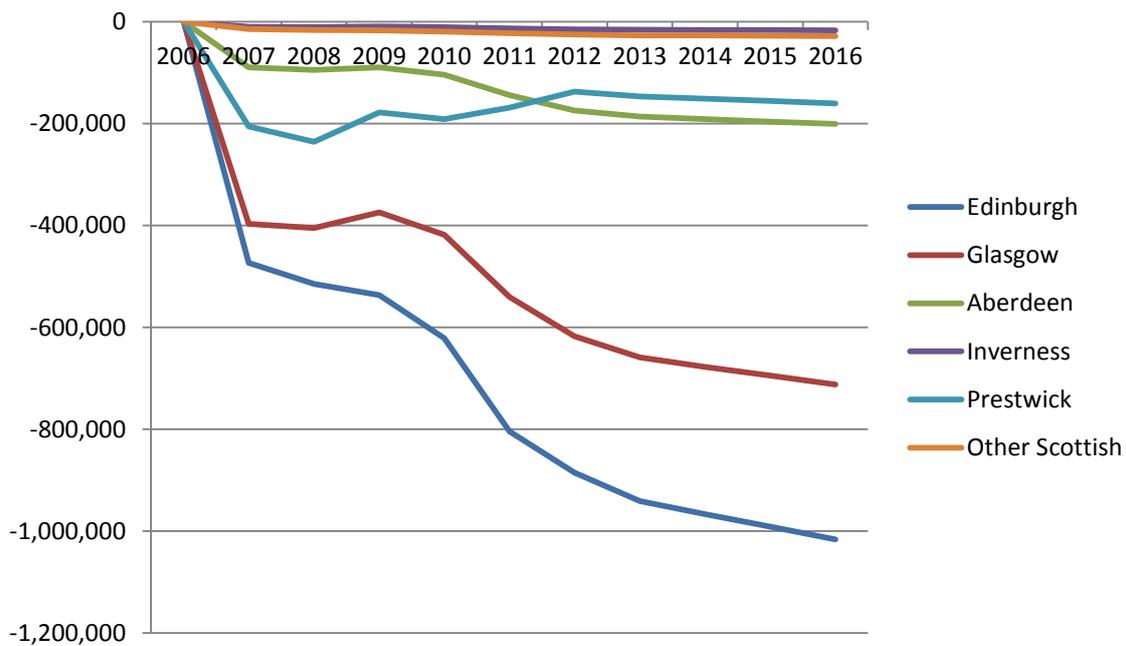
Source: York Aviation.

- 3.9 The initial doubling of APD in 2007 has an initial dramatic effect with around 1.2 million passengers foregone in 2007, increasing to 1.3 million in 2008 as the full year effect is felt. The next significant step comes with the increase in rates November 2010. In 2011, the first full year of impact, the gap between the Without APD increases case and the With APD Increases case grows from around 1.4 million in 2010 (partially affected by the change) to around 1.7 million in 2011.
- 3.10 The APD increases in 2012 and 2013 are relatively small in comparison to previous changes but even so, by 2016 the total difference in traffic for the year has reached around 2.1 million passengers. This represents around 8.6% of project traffic in 2016. It should be noted that there is a temporary narrowing of the gap in 2009 caused by the general decline in traffic relating to the recession.
- 3.11 The effects of APD are felt across Scotland’s airports but there are winners and losers, as can be seen in **Figure 3.2**. Edinburgh is the largest loser in volume terms, with around 1.0 million passengers per annum lost by 2016, followed by Glasgow with around 0.7 million passengers lost per annum by 2016. The relative losses reflect the size of the two airports and in Edinburgh’s case the concentration of low fares airlines. The lower fares offered by these airlines means that the percentage change in fare from a change in APD is greater and hence the impact is higher.

3.12 Aberdeen sustains the third largest losses, at around 200,000 passengers per annum by 2016. The impact on Aberdeen is cushioned to some degree by the high proportion of business traffic at the Airport.

3.13 The most affected in percentage terms is Prestwick Airport, which has lost around 14% of current traffic as a result of APD according to this analysis. This is a result of the Airport’s focus on low fares travel and high proportion of leisure travellers. As described above, APD makes up a higher proportion of in trip costs for low fares airlines and leisure travellers tend to have a higher elasticity to changes in fares.

Figure 3.2: Impact on Individual Scottish Airports



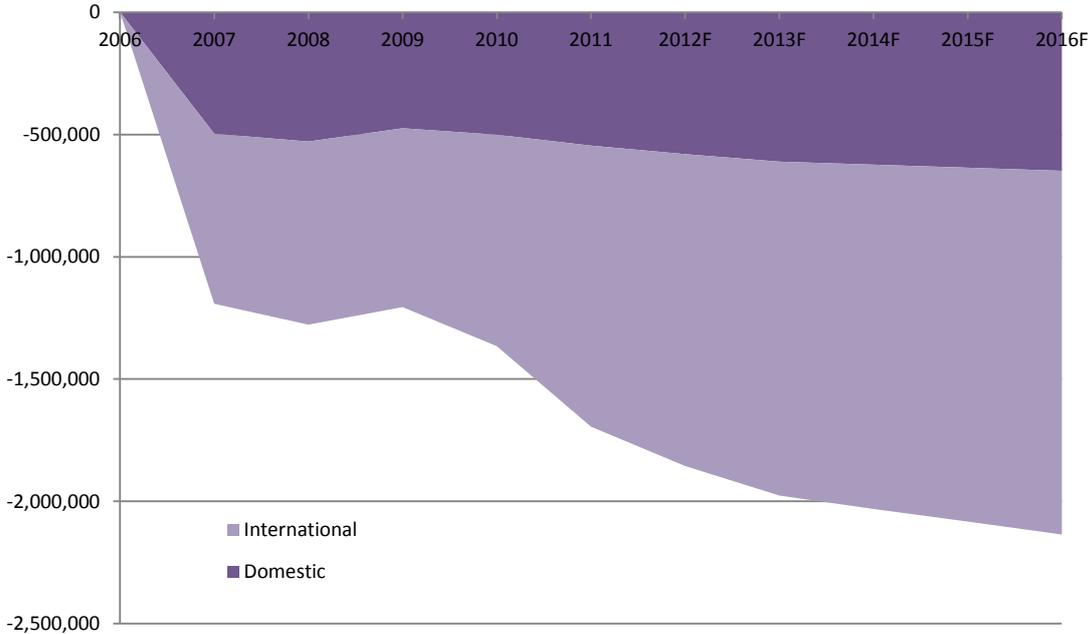
Source: York Aviation.

3.14 The losses at Inverness and the Other Scottish Airports are cushioned by the fact that services departing from these airports are exempt from APD. It should be noted that losses at Prestwick actually shrink over time. This relates to the general decline in traffic at the airport and it may be that the impact of APD at the Airport is being understated.

3.15 It is also interesting to note the balance in losses between domestic and international travel. Initially, as steep increases were seen across the board losses were relatively even. However, as APD has been restructured and increases focussed on longer haul travel, international traffic has become more heavily impacted.

The Impact of APD in Scotland

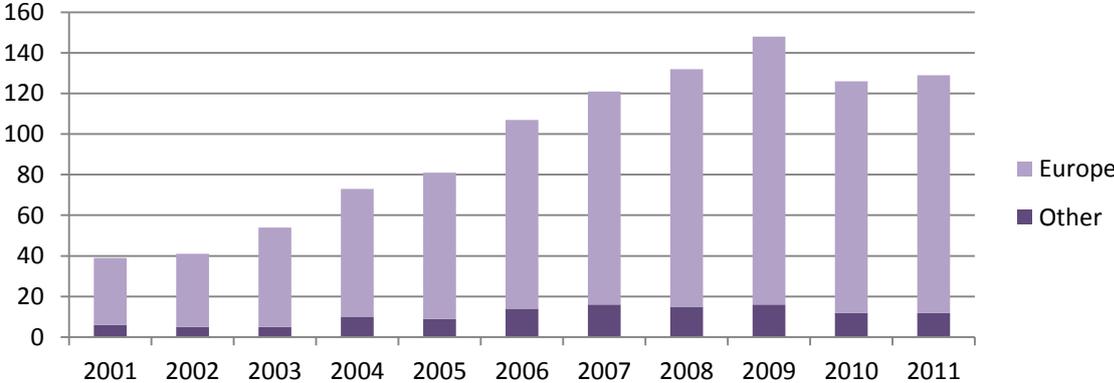
Figure 3.3: Domestic and International Passenger Losses Due to APD



Source: York Aviation.

3.16 This focus of the impact on international traffic is particularly concerning given the policy aims of the Scottish Government to grow the Country’s international connectivity. **Figure 3.4** shows the number of scheduled destinations served from Scotland’s airports¹ over recent years. It shows that there has been a decline since 2008, coinciding with both the recession and the changes to APD.

Figure 3.4: Number of International Scheduled Destinations Served by Scotland’s Airports

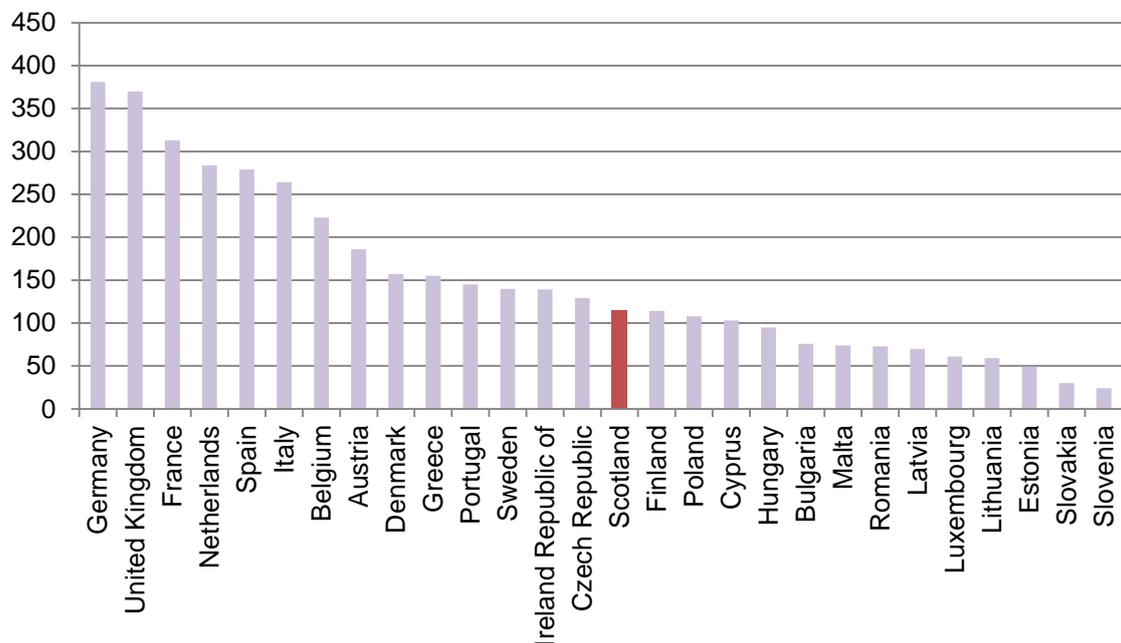


Source: CAA Statistics.

¹ Destinations with more than 5,000 passengers per annum.

3.17 **Figure 3.5** shows the number of scheduled international cities served from EU countries in 2012 taken from OAG. This shows the importance of Scotland developing its connectivity further, especially given its peripherality. It is currently within the bottom half of this group.

Figure 3.5: Number of International Cities Served by Country in 2012



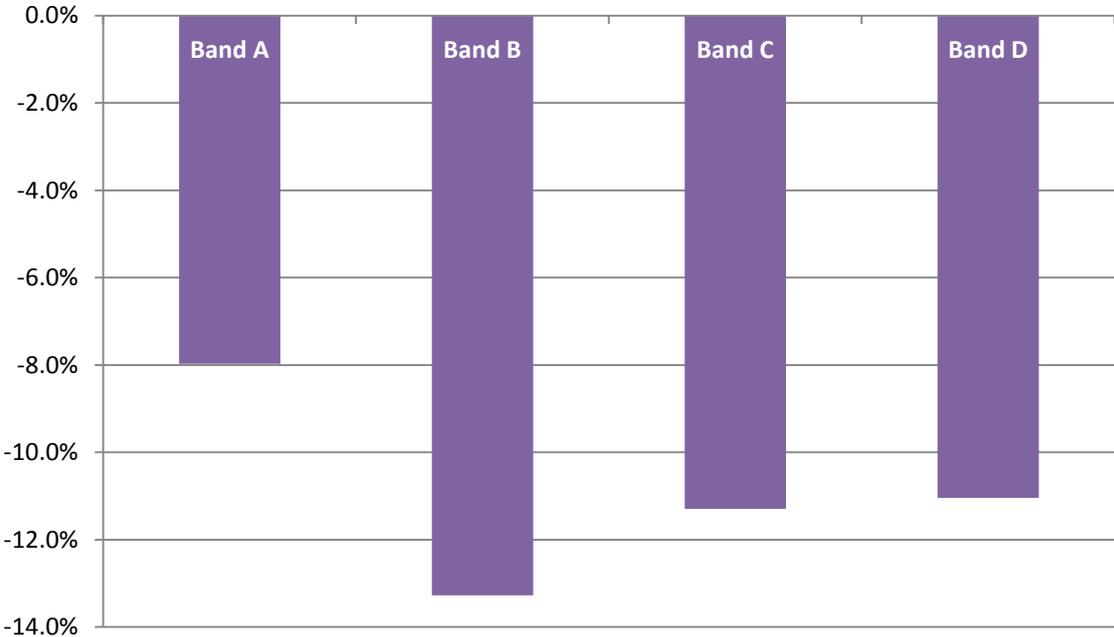
Source: OAG.

3.18 Furthermore, it is particularly concerning that it appears to be longer haul international destinations that are particularly impacted by the changing structure of APD and increasing rates. **Figure 3.6** demonstrates that while Band A travel has been affected somewhat less than the market as a whole, Bands B, C and D are impacted substantially more heavily. It shows the cumulative impact of the changes to APD by 2013 in terms of the reduction in traffic by Band. Band B is the worst affected, possibly reflecting the relatively lower fares on to North America in particular.

Conclusions

3.19 Overall, it seems clear that increasing APD and its changing structure has had a significant impact on the Scottish Air Transport market. Based on our analysis, we estimate that by 2016 Scotland’s airports will be handling around 2.1 million passengers per annum fewer than they might have been if the APD changes since 2007 had not been implemented. These impacts are being felt at all Scotland’s airports but primarily at Edinburgh and Glasgow in volume terms. Aberdeen also loses a significant volume of passengers. Prestwick that has been hardest hit in percentage terms. In terms of the market segments affected, our analysis suggests that international traffic has been more seriously affected, with a disproportionate impact on long haul markets.

Figure 3.5: Percentage Impact of APD by Band by 2013

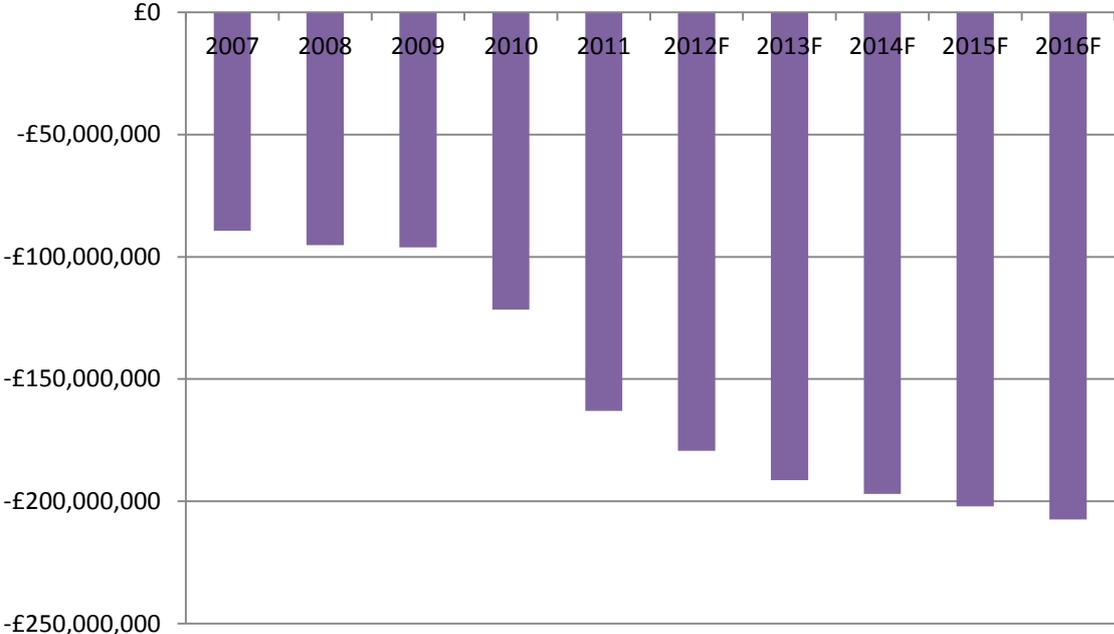


Source: York Aviation.

4 ECONOMIC IMPACT OF THE CHANGES TO APD

- 4.1 In this section, we consider the impact that the changes in APD have had on the Scottish economy.
- 4.2 In our view much of the economic impact associated with air services in a modern economy comes from the connectivity these services provide to international markets for trade and investment, increased competition and deeper and broader knowledge bases. Constraining the growth of Scotland's airports via APD can ultimately only have a negative impact from this perspective. APD makes it harder for airports to attract new routes or improved levels of service. Over time this will impact on Scotland's attractiveness as a place to invest and its competitiveness in international markets. This in turn will negatively impact on Scotland's international economy, including key sectors such as banking and finance, oil and gas, creative industries, technology businesses and advanced manufacturing.
- 4.3 Another key area of potential impact is Scotland's tourism industry. The 2009 CAA Passenger Survey (the last available covering the main Scottish airports) suggests that around 36% of international passengers are visitors to Scotland. Furthermore, it suggests that around 40% of passengers on domestic services are inbound to Scotland. Based on this assessment and combined with spend per trip information from VisitScotland and VisitBritain, we have identified the tourism expenditure lost as a result of APD between 2007 and 2016.
- 4.4 In 2007 lost tourism expenditure amounted to around £90 million per annum following the doubling of APD rates. Following the 2009 rise in rates and the restructuring of APD the level of lost tourism expenditure rose significantly again, reaching around £160 million per annum by 2011. At the end of the period to 2016 the tourism expenditure foregone is expected to reach around £210 million per annum. This foregone revenue will reduce the tourism industries ability to support employment and prosperity. It will also result in less tax revenue through VAT reductions, lost income tax from the reduced employment in tourism and related sectors, and likely reductions in corporate taxes.
- 4.5 It is also interesting to note how losses increase, particularly after the 2010 changes that significantly increased the APD burden on medium and long haul routes. This is clearly reflected in the loss of more, higher spending international visitors with the consequent acceleration of the losses in tourism expenditure.

Figure 4.1: Estimated Tourism Expenditure Lost Due to APD



Source: York Aviation.

- 4.6 It should also not be forgotten that Scotland’s airports are significant employment centres in their own right, generating both jobs on-site and in the wider economy through supply chain and expenditure effects. Research in to the economic impact of Scotland’s main airports undertaken in recent years by York Aviation, SQW Consulting and Highlands and Islands Airports Limited, suggests that over 11,000 people are employed on-site at Scotland’s airports, with a further nearly 8,000 supported in the wider economy through supply chain and expenditure effects. With APD constraining traffic growth, Scotland’s airports will not be able to realise their potential as generators of employment and prosperity.
- 4.7 Across these two impacts the reduced economic activity will also result in a significant loss of tax revenue. While assessing this impact is potentially highly complex, using a simplified approach focussing on lost VAT from tourism expenditure and lost income tax, we estimate the impact of APD in Scotland in terms of other tax revenues could be around £50 million in 2016.